

**REMARKS**

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-9 remain pending, wherein claim 2 is amended.

Claims 1, 6 and 9 are rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of U.S. Patent No. 6,661,472 (Shintani) and U.S. Patent No. 6,772,433 (LaJoie). This ground of rejection is respectfully traversed.

The combination of Shintani and LaJoie does not render claim 1 obvious because the combination does not disclose or suggest all of the elements of claim 1. For example, the combination does not disclose or suggest a control unit that “selects a sub-channel having the largest sub-channel number, when receiving the instruction by the UP key and not finding an upward adjacent channel in the main channel with reference to the channel information.” The combination also does not disclose or suggest a control unit that “selects a sub-channel having the smallest sub-channel number, when receiving the instruction by the DOWN key and not finding a downward adjacent channel in the main channel with reference to the channel information.”

Shintani discloses a technique for channel selection in a digital television that includes receiving major and minor channel numbers. As recognized by the Office Action, Shintani does not disclose or suggest a control unit that selects sub-channels in the manner recited in Applicants’ claim 1.

To remedy this deficiency of Shintani, the Office Action cites LaJoie. LaJoie does not, however, even mention sub-channels. Accordingly, LaJoie

cannot disclose or suggest a control unit that selects sub-channels in the manner recited in Applicants' claim 1.

Nevertheless, the Office Action appears to equate a theme or favorite programming list with a main channel and the channels contained in such a list as sub-channels. As recited in Applicants' claim 1, "the sub-channels are assigned virtual channels headed by the same channel number as the main channel in the analog broadcast." There is no such correspondence between a theme or favorite programming list and the channels contained in the list disclosed by LaJoie.

Moreover, assuming for the sake of argument that the theme or favorite programming list could possibly correspond to a main channel and the channels contained in such a list correspond to sub-channels, LaJoie does not disclose a control unit that operates in the manner recited in Applicants' claim 1. The Office Action relies upon channel list scrolling disclosed by LaJoie in column 25, lines 30-52, as corresponding to the sub-channel selection recited in Applicants' claim 1. This section discloses two different methods of scrolling: (1) rolling over the list when either the beginning or end is reached; and (2) no roll over in the list.

The Office Action relies upon the second method as disclosing the sub-channel selection of Applicants' claim 1. As disclosed in column 25, lines 49-52 of LaJoie, in this method "the subscriber cannot continue scrolling the channel list in the same direction once the top or bottom of the list has been reached."

Accordingly, this method of LaJoie does not disclose or suggest that when the top of the list is reached a sub-channel having the largest sub-channel number is selected or when the bottom of the list is reached a sub-channel having the smallest sub-channel number is selected. Therefore, even under the interpretation of LaJoie provided by the Office Action, LaJoie does not disclose or suggest the selection of sub-channels by a control unit in the manner recited in Applicants' claim 1.

It is also respectfully submitted that one of ordinary skill in the art would not have been motivated to combine Shintani and LaJoie in the manner described in the Office Action. It appears that the Office Action is combining the use of a favorite or theme list from LaJoie into the major channels of Shintani, and the channels included in such a list from LaJoie into the minor channels of Shintani. However, one of ordinary skill in the art would not provide such an interpretation because a favorite or theme list is not a major channel, and the channels in such a list are not a minor channel. Accordingly, it is respectfully submitted that the combination of Shintani and LaJoie is based on improper hindsight reconstruction, and not based on a combination that would have been made by one skilled in the art.

Because the combination of Shintani and LaJoie does not disclose all of the elements of Applicants' claim 1 and one of ordinary skill in the art would not have been motivated to combine them in the manner described in the Office Action, the combination cannot render claim 1 obvious.

Claim 6 is patentably distinguishable over the combination of Shintani and LaJoie at least by virtue of its dependency from claim 1.

Claim 9 recites a method with selecting acts similar to the sub-channel selection discussed above with regard to claim 1. Accordingly, claim 9 is patentably distinguishable over the combination of Shintani and LaJoie for similar reasons to those discussed above with regard to claim 1.

For at least those reasons stated above, it is respectfully requested that the rejection of claims 1, 6 and 9 for obviousness in view of the combination of Shintani and LaJoie be withdrawn.

Claims 2, 3, 7 and 8 are rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of Shintani and U.S. Patent Application Publication No. 2001/0052124 (Kim). This ground of rejection is respectfully traversed.

The combination of Shintani and Kim does not render Applicants' claim 2 unpatentable because the combination does not disclose or suggest all of the elements of claim 2. For example, the combination does not disclose or suggest a control unit that "searches the main channel currently received in reciprocation for the sub-channel to be selected when there is not the upward/downward adjacent sub-channel in the channel information, wherein the search in reciprocation is a search for an adjacent sub-channel channel in an opposite direction from a direction selected by the operation key."

The Office Action recognizes that Shintani does not disclose this element, and instead relies upon the disclosure in paragraphs 0041 and 0042 of Kim. This section describes a portion of the method of Figure 4 of Kim in connection with Figures 5a-5c of Kim. As illustrated in Figure 4, when the channel up key is pressed (“Yes” path out of step 410) and the minor channel number of viewing is the highest number (“Yes” path out of step 414), then the program of the lowest minor channel number is displayed (step 418). (Paragraph 0041). Kim discloses that in this method “if the user presses the channel up key under the screen display state shown in Fig. 5C, the screen display state is changed as illustrated in Fig. 5A.” (Paragraph 0041).

However, this technique does not select an adjacent channel number. As illustrated in Figures 5A and 5C of Kim below, if a user presses the channel up key when channel 32-4 is selected, then channel 32-1 is selected.

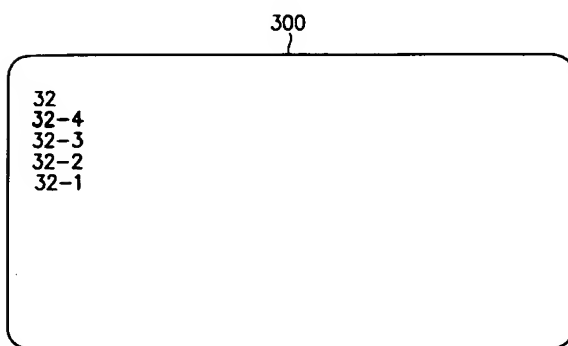


FIG. 5C

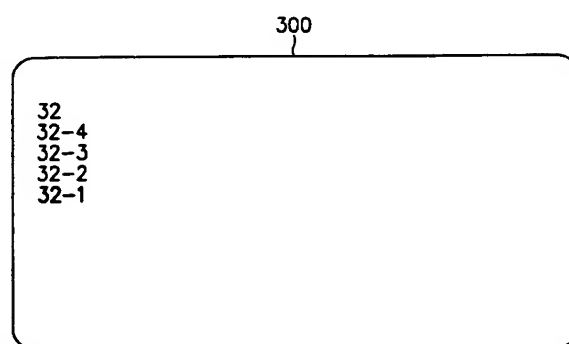


FIG. 5A

As clearly illustrated in Figures 5C and 5A, channels 32-1 and 32-4 are not adjacent. Accordingly, this section of Kim relied upon by the Office Action does not disclose or suggest that “the search in reciprocation is a search for an adjacent sub-channel channel in an opposite direction from a direction selected by the operation key” as recited in Applicants’ claim 2.

Because the combination of Shintani and Kim does not disclose or suggest a control unit that “searches the main channel currently received in reciprocation for the sub-channel to be selected when there is not the upward/downward adjacent sub-channel in the channel information, wherein the search in reciprocation is a search for an adjacent sub-channel channel in an opposite direction from a direction selected by the operation key” as recited in Applicants’ claim 2, the combination cannot render this claim obvious.

Claims 3, 7 and 8 are patentably distinguishable over the combination of Shintani and Kim at least by virtue of their dependency from claim 2.

For at least those reasons stated above, it is respectfully requested that the rejection of claims 2, 3, 7 and 8 for obviousness in view of the combination of Shintani and Kim be withdrawn.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Shintani, Kim and U.S. Patent No. 6,483,547 (Eyer). This ground of rejection is respectfully traversed.

Claim 4 depends from claim 2. As discussed above, the combination of Shintani and Kim does not disclose or suggest all of the elements of Applicants’

claim 2. It is respectfully submitted that Eyer does not remedy the deficiencies of this combination. Accordingly, the combination of Shintani, Kim and Eyer cannot render claim 2, and in turn claim 4, obvious.

For at least those reasons stated above, it is respectfully requested that the rejection of claim 4 for obviousness in view of the combination of Shintani, Kim and Eyer be withdrawn.

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Shintani, LaJoie and U.S. Patent No. 6,590,618 (Park). This ground of rejection is respectfully traversed.

Claim 5 depends from claim 1. As discussed above, the combination of Shintani and LaJoie does not disclose or suggest all of the elements of Applicants' claim 1. It is respectfully submitted that Park does not remedy the deficiencies of this combination. Accordingly, the combination of Shintani, LaJoie and Park cannot render claim 1, and in turn claim 5, obvious.

Moreover, Applicants' claim 5 recites an input device that "includes a second UP key and a second DOWN key, wherein the second UP and DOWN keys instruct the control unit to select a main channel and the UP and DOWN keys instruct the control unit to select sub-channels." To reject Applicants' claim 5 the Office Action relies upon buttons 31, 22, 25 and 26 of Park as corresponding to the UP and DOWN keys and the second UP and DOWN keys recited in Applicants' claim 5. In contrast to the UP and DOWN keys recited in Applicants' claim 5 that select main channels or sub-channels, the buttons of

Park select channels of a main picture and sub-picture. Accordingly, Park does not disclose the UP and DOWN keys recited in Applicants' claim 5.

For at least those reasons stated above, it is respectfully requested that the rejection of claim 5 for obviousness in view of the combination of Shintani, LaJoie and Park be withdrawn.

Claim 1 is rejected on the ground of non-statutory obviousness-type double patenting over claim 1 of U.S. Patent No. 7,050,117 in view of LaJoie. This ground of rejection is respectfully traversed.

The Office Action relies upon LaJoie as disclosing the control unit selecting sub-channels in the manner recited in Applicants' claim 1. As discussed above with regard to the combination of Shintani and LaJoie, LaJoie does not disclose a control unit that selects sub-channels in the manner recited in Applicants' claim 1. Accordingly, Applicants' respectfully request that this double patenting rejection be withdrawn.

All outstanding objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. Notice to this effect is earnestly solicited. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

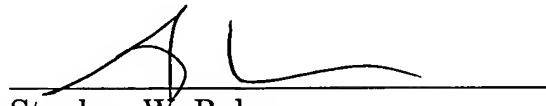


Serial No. 10/058,035  
Amendment Dated: December 19, 2006  
Reply to Office Action Mailed: October 3, 2006  
Attorney Docket No. 010482.50894US

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #010482.50894).

Respectfully submitted,

December 19, 2006

  
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